



(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
30.07.2003 Bulletin 2003/31

(51) Int Cl.7: H04L 27/26

(43) Date of publication A2:
22.03.2000 Bulletin 2000/12

(21) Application number: 99306633.1

(22) Date of filing: 20.08.1999

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE
Designated Extension States:
AL LT LV MK RO SI

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(30) Priority: 15.09.1998 US 153393

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(54) Avoidance of spurious emissions from xDSL transmission

(57) To avoid spurious energy radiation from a wireline communication resource (42-44) supporting data over voice, such as in xDSL, modems (40, 46) supporting a multi-carrier transmission scheme undertake a line balance assessment (136-138) for each sub-channel carrier within the system. Specifically, an addressed modem (40) measures, for example, the signal to noise ratio of a differential transmission mode and a common transmission mode to provide the balance assessment (138). More particularly, a receive chain in the addressed modem is selectively switched (84) to receive

the differential mode as appearing across the terminals of an isolation transformer (66) or the common mode (as seen with respect to ground) from a centre tap (88) in a line-side winding (70) of the isolation transformer (66). Any sub-channel carrier that fails to provide a pre-determined level of balance (140) is de-selected (141) by the modem and not used for traffic. Generally, the modems (40, 46) at both ends of the wireline connection (42-44) notify one another of selected sub-channels, while the concept can be employed in a dynamic in-call fashion (152, 158-160).

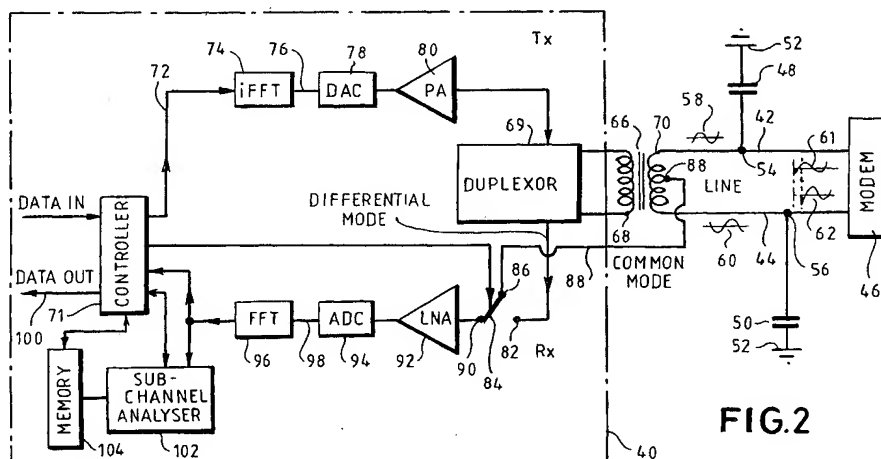


FIG.2



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 99 30 6633

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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 5 June 2003	Examiner Scriven, P
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

EPO FORM 1503 03/02 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 99 30 6633

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